

The Mobile Munitions Assessment System.



Mobile Munitions Assessment System

Providing portable imaging and tactical response

Just as medical imaging systems deliver important information to aid in medical decisions, the Mobile Munitions Assessment System (MMAS) provides data

about the chemical contents of sealed munitions and containers. The equipment deployed from the MMAS assists highly trained personnel to assess, identify

and safely secure munitions containing unknown liquids.

MMAS hosts the capabilities required for a complete response and assessment effort as it relates to discovered, recovered, stored chemical munitions or explosives. In these instances, unique hardware capabilities are needed to provide information to develop plans, and ultimately dispose of chemical weapons and hazardous materials.

As an integrated command-and-control system with distinctive assessment capabilities, MMAS comes complete with satellite communications, data collection, video surveillance,



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The Energy of Innovation

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X-ray assessment systems, Portable Isotopic Neutron Spectroscopy (PINS) system and Raman Spectroscopy System.

Two systems were developed to meet the specific assessment needs for MMAS: the PINS system and the Digital Radiography and Computed Tomography (DRCT). Idaho National Laboratory provided scientific, engineering and fabrication expertise for the design, integration and build of these systems, as well as the complete mobile platform of the MMAS.

The MMAS consists of a commercially available, medium-duty, four-wheel-drive, diesel-powered truck chassis with an enhanced cargo section. These custom vehicles are sturdy and reliable, allowing operators to access various terrains to safely perform operations. A built-in generator provides enough power to run all operations.

The MMAS may be operated in all seasons of the year and can safely and effectively, by use of nonintrusive means, assess munitions and send data to a subject matter expert panel for final assessment and disposition recommendation.

INL is dedicated to meeting the needs of each sponsor, whether military or federal government. We have the capabilities and resources needed to design, build and integrate specialized mobile systems for our customers.

The MMASs components and systems:

- Heating and air conditioning system
- Electrical power supply and distribution system
- Portable Isotopic Neutron Spectroscopy (PINS)
- Liquid nitrogen (LN2) transport capabilities
- Radiography systems
- Raman Spectroscopy System
- Data acquisition and handling system
- Audio/video equipment
- Communications equipment
- Support equipment

Unique capabilities

INL's production of MMAS vehicles demonstrates an adaptability to meet a diverse customer set. Engineers, scientists and technicians at the lab rapidly design, validate and manufacture unique capabilities for a variety of government sponsors.

For more information

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Capabilities are designed for X-raying recovered munitions at remote locations.



The mobile application includes tools and capabilities synced with the interior computational systems for munition examination.

- MMAS mobile platform